

- 70. The apparatus of claim 69 wherein the patient is selected from the group consisting of an infant, newborn infant, toddler, and child.
- 71. The apparatus of claim 70, wherein the microprocessor performs the step of generating a normalized data set of RR intervals.
- 72. The apparatus of claim 71, wherein the microprocessor calculates one or more of the third and higher moments of the data set and identifies the characteristic abnormality based on the one or more moments.
- 73. The apparatus of claim 72, wherein the microprocessor calculates the skewness of the data set and identifies the characteristic abnormality based on the skewness.
- 74. The apparatus of claim 72, wherein the microprocessor calculates the kurtosis of the data set and identifies the characteristic abnormality based on the kurtosis.
- 75. The apparatus of claim 71, wherein the microprocessor calculates one or more percentile values of the data set and identifies the characteristic abnormality based on the one or more percentile values.
- 76. The apparatus of claim 75, wherein the microprocessor calculates the 10th percentile value of the data set and identifies the characteristic abnormality based on the 10th percentile value.



- An apparatus for early detection of subacute, potentially catastrophic infectious illness in a patient, wherein the patient is selected from the group consisting of a premature newborn infant, infant, newborn infant, toddler and child, comprising (1) a monitoring device, continuously monitoring the patient's RR intervals, and (2) a microprocessor, said microprocessor performing steps comprising:
 - (a) generating a normalized data set of the RR intervals;
 - (b) calculating one or more of (i) moments of the data set selected from the third and higher moments and (ii) percentile values of the data set;
 - (c) identifying an abnormal heart rate variability based on one or more of the moments and the percentile values.
- 78. The apparatus of claim 77, wherein the microprocessor calculates the third moment of the data set.
- 79. The apparatus of claim 77, wherein the microprocessor calculates the fourth moment of the data set.
- 80. The apparatus of claim 77, wherein the microprocessor calculates the 10th percentile of the data set.